# FAA News

**Federal Aviation Administration, Washington, DC 20591**

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## Fact Sheet
### Wide-Area Multilateration in Colorado

**The Problem**

The rugged terrain that makes Colorado a popular ski destination also makes it impossible for air traffic controllers to maintain radar surveillance over aircraft in certain areas.

Limitations to aircraft operations are compounded by bad weather, which causes flight delays and cancellations. The Colorado Department of Transportation estimates an average of 75 aircraft are delayed each day at remote airports from November to April.

**The Solution**

The FAA plans to improve safety while reducing delays at four Colorado airports through a new technology called Wide Area Multilateration (WAM).

The new system, the result of a joint cost-sharing agreement between the FAA and the Colorado DOT, began initial operations on Sept. 12 at Denver Center serving the Yampa Valley-Hayden, Craig-Moffat, Steamboat Springs and Garfield County Regional-Rifle Airports, just in time for the upcoming ski season.

Under the agreement, the Colorado DOT paid for the equipment, physical site preparations, power and telecommunications. The FAA will commission and operate the system, provide maintenance, and eventually upgrade it with the satellite-based surveillance system called Automatic Dependent Surveillance-Broadcast (ADS-B).

**How it Works**

WAM provides surveillance through a network of small sensors deployed in remote areas. The sensors send out signals that are received and sent back by aircraft transponders. System computers immediately analyze those signals and are able to determine the precise location of aircraft through triangulation.

This data is transmitted to screens viewed by air traffic controllers for separation of aircraft.

**Benefits**

The system improves safety, efficiency and capacity by allowing controllers to see aircraft that are outside radar coverage. It saves time and money that would otherwise be lost due to flight delays and cancellations or diversions to other airports.

The improved surveillance also translates into more efficient flight paths, saving time and fuel burn.

**The Future**

WAM will serve as a backup to ADS-B in the event of a GPS outage in high value airspace. It will also serve as an additional source for traffic broadcasts to aircraft equipped with proper avionics.

The FAA will monitor how the system works at the four Colorado airports over the next year to determine further deployment.

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